

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application.

1. (previously presented) A crystalline form of gatifloxacin characterized by an x-ray diffraction diagram consisting essentially of a major reflection at about $17.2^{\circ} \pm 0.2^{\circ} 2\theta$.
2. (original) The crystalline form of gatifloxacin of claim 1 having an x-ray diffraction diagram as shown in Figure 1.
3. (previously presented) A method of making the crystalline gatifloxacin of claim 1 comprising the steps of:
 - a) providing, at a temperature of at least about 70°C , a solution of gatifloxacin in a solvent consisting essentially of a mixture of methanol and water, wherein the water is present in the mixture in an amount of about 5 vol-% to about 15 vol-% relative to the methanol,
 - b) cooling the solution to obtain a suspension,
 - c) isolating a solid from the suspension, and
 - d) drying the isolated solid at a temperature of about 40°C to about 70°C to obtain the crystalline form of gatifloxacin.
4. (original) The method of claim 3 wherein the solution is cooled to ambient temperature and thereafter to a temperature of about 0°C to about 10°C .
5. (previously presented) The method of claim 3 wherein the water is present in the mixture in an amount of about 10 vol-% relative to the methanol.
6. (previously presented) The method of claim 3 wherein the isolated solid is dried at a temperature of about 55°C .
7. (previously presented) A crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 8.8° , 14.1° , 17.6° , 18.2° , 22.0° , and $22.6^{\circ} \pm 0.2^{\circ} 2\theta$.
8. (original) The crystalline form of gatifloxacin of claim 7 having an x-ray diffraction diagram as shown in Figure 2.

9. (previously presented) A method of making the crystalline form of gatifloxacin of claim 8, comprising the steps of:

a) slurrying gatifloxacin in ethanol, wherein the gatifloxacin slurried is selected from

i) a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 12.5° , 20.0° , 20.9° , 22.2° , 24.5° , 25.1° , and $28.0^{\circ} \pm 0.2^{\circ} 2\theta$,

ii) a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 7.4° , 8.9° , 9.6° , 11.4° , 12.2° , 12.9° , 14.1° , 16.7° , 21.2° , 21.8° , 24.1° , and $26.0^{\circ} \pm 0.2^{\circ} 2\theta$, and

iii) mixtures of i) and ii),

b) isolating a solid from the slurry, and

c) drying the isolated solid at ambient temperature and pressure to obtain the crystalline form of gatifloxacin of claim 8.

10. (previously presented) A crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 11.1° , 11.7° , 12.5° and $23.0^{\circ} \pm 0.2^{\circ} \theta$.

11. (original) The crystalline form of gatifloxacin of claim 10 having an x-ray diffraction diagram as shown in Figure 3.

12. (previously presented) A method of making the crystalline form of gatifloxacin of claim 10 comprising the steps of:

a) providing, at a temperature of at least about 75°C , a solution of gatifloxacin in a solvent consisting essentially of a mixture of ethanol and water, wherein the ethanol is present in the mixture in an amount of at least about 95 vol-% relative to the water,

b) cooling the solution to obtain a suspension, and

c) isolating the crystalline form of gatifloxacin from the suspension.

13. (original) The method of claim 12 wherein the solution is cooled to ambient temperature and thereafter to a temperature of about 0°C to about 10°C .

14. (previously presented) The method of claim 12 wherein the water is present in the mixture in an amount of about 1 vol-% relative to the ethanol.

15. (previously presented) A crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 6.8°, 7.1°, 11.1°, 15.5°, and 17.4° $\pm 0.2^\circ 2\theta$.

16. (previously presented) The crystalline form of gatifloxacin of claim 15 having an x-ray diffraction diagram as shown in Figure 4.

17. (previously presented) A method of making the crystalline form of gatifloxacin of claim 15 comprising the steps of:

- a) providing, at reflux, a solution of gatifloxacin in a solvent consisting essentially of a mixture of acetonitrile and water, wherein the water is present in the mixture in an amount of about 2 vol-% relative to the acetonitrile,
- b) cooling the solution to obtain a suspension,
- c) isolating a solid from the suspension, and
- d) drying the isolated solid at about 50° C and a pressure of about 10 to about 400 mm Hg to obtain the crystalline form of gatifloxacin.

18. (previously presented) The method of claim 17, wherein the solution is cooled to ambient temperature and thereafter to a temperature of about 0° C to about 10°C.

19. (previously presented) A crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 9.3°, 11.0°, 12.0°, 14.5°, 18.6° and 21.2° $\pm 0.2^\circ 2\theta$.

20. (canceled)

21. (currently amended) The crystalline form of gatifloxacin of claim ~~20~~ 19, having an x-ray diffraction diagram as shown in Figure 5.

22. (previously presented) A method of making the crystalline form of gatifloxacin of claim 19 comprising the steps of:

- a) crystallizing gatifloxacin from acetonitrile,
- b) isolating the crystalline gatifloxacin,
- c) slurrying the isolated crystalline gatifloxacin in a lower alkanol having 1 to 4 carbon atoms for at least about 2 hours, and
- d) isolating the crystalline form of gatifloxacin of claim 19 from the slurry.

23. (original) The method of claim 22 wherein the lower alkanol is ethanol.
24. (previously presented) A crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 7.4°, 8.9°, 9.6°, 11.4°, 12.2°, 12.9°, 14.1°, 16.7°, 21.2°, 21.8°, 24.1°, and $26.0^\circ \pm 0.2^\circ$ 2 θ .
25. (previously presented) The crystalline form of gatifloxacin of claim 24 having an x-ray diffraction diagram as shown in Figure 6.
26. (previously presented) A method of making the crystalline form of gatifloxacin of claim 24 comprising the steps of:
- a) crystallizing gatifloxacin from acetonitrile,
 - b) isolating the crystalline gatifloxacin,
 - c) slurrying the isolated crystalline gatifloxacin in ethanol for less than about 2 hours, and
 - d) isolating the crystalline form of gatifloxacin of claim 24 from the slurry.
27. (previously presented) A method of making gatifloxacin sesquihydrate comprising the step of maintaining a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 11.1°, 11.7°, 12.5° and $23.0^\circ \pm 0.2^\circ$ 2 θ at ambient temperature for a time sufficient to effect conversion to the sesquihydrate.
28. (previously presented) The method of claim 27 wherein the crystalline form of gatifloxacin is maintained for about one month.
29. (previously presented) A method of making a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 13.5°, 19.6°, 20.4°, 23.6°, 25.8°, and $28.5^\circ \pm 0.2^\circ$ 2 θ comprising the step of drying gatifloxacin form K at about 50° C and a pressure of about 10 mm Hg.
30. (previously presented) The method of claim 29 wherein the gatifloxacin form K is dried for about 24 hours.
31. (previously presented) A method of making a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 6.7°, 11.3°, 13.8°, and $16.4^\circ \pm 0.2^\circ$ 2 θ comprising the step of drying gatifloxacin form K at about 50° C and atmospheric pressure.

32. (previously presented) The method of claim 31 wherein the gatifloxacin form K is dried for about 12 to about 18 hours.

33. (previously presented) A method of making a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 13.5° , 19.6° , 20.4° , 23.6° , 25.8° , and $28.5^{\circ} \pm 0.2^{\circ} 2\theta$ comprising the step of maintaining a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram consisting essentially of a major reflection at about $17.2^{\circ} \pm 0.2^{\circ} 2\theta$ at ambient temperature for a time sufficient to effect conversion to the crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 13.5° , 19.6° , 20.4° , 23.6° , 25.8° , and $28.5^{\circ} \pm 0.2^{\circ} 2\theta$.

34. (previously presented) The method of claim 33 wherein the crystalline form of gatifloxacin characterized by an x-ray diffraction diagram consisting essentially of a major reflection at about $17.2^{\circ} \pm 0.2^{\circ} 2\theta$ is maintained for about 2 months.

35. (previously presented) A method of making gatifloxacin hemihydrate comprising the step of maintaining a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 8.8° , 14.1° , 17.6° , 18.2° , 22.0° , and $22.6^{\circ} \pm 0.2^{\circ} 2\theta$ at room temperature for a time sufficient to effect conversion to the hemihydrate.

36. (previously presented) A method of making the crystalline form of gatifloxacin of claim 24 comprising the step of heating a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 11.1° , 11.7° , 12.5° and $23.0^{\circ} \pm 0.2^{\circ} 2\theta$ at 50°C .

37. (previously presented) A pharmaceutical composition comprising at least one pharmaceutically acceptable excipient and at least one of

i) a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram consisting essentially of a major reflection at about $17.2^{\circ} \pm 0.2^{\circ} 2\theta$,

ii) a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 8.8° , 14.1° , 17.6° , 18.2° , 22.0° , and $22.6^{\circ} \pm 0.2^{\circ} 2\theta$,

iii) a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 11.1° , 11.7° , 12.5° and $23.0^{\circ} \pm 0.2^{\circ} 2\theta$,

iv) a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 6.8° , 7.1° , 11.1° , 15.5° , and $17.4^{\circ} \pm 0.2^{\circ} 2\theta$,

v) a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 9.3° , 11.0° , 12.0° , 14.5° , 18.6° and $21.2^{\circ} \pm 0.2^{\circ} 2\theta$, or

vi) a crystalline form of gatifloxacin characterized by an x-ray diffraction diagram having reflections at about 7.4° , 8.9° , 9.6° , 11.4° , 12.2° , 12.9° , 14.1° , 16.7° , 21.2° , 21.8° , 24.1° , and $26.0^{\circ} \pm 0.2^{\circ} 2\theta$.